

IN THE CLAIMS

Please amend Claims 1, 3, 6, 7, 16, 17, 19, 20, 22, 26, 29, 31, 34, 40, 41, 47, 48, 50, 52, 53 and 54 as indicated.

Please cancel Claims 11 and 42 without prejudice and without disclaimer of subject matter.

1. (Currently Amended) A video surveillance system comprising:  
at least one video camera; and  
at least one motion detector comprising:  
a lens ~~having a field of view fixedly directed to an area of interest~~, and  
an imager for receiving an image through said lens and converting said image to raw video data,  
said motion detector being configured to:  
~~monitor said video data for movement of an object in said field of view without application of at least one visual perception algorithm to said video data, and~~  
analyze said raw video data to detect changes from a first video frame to a next video frame;  
determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;  
sequence between the multiple detection areas having the presence of changes;  
and  
provide a plurality of sequenced detector output ~~in response to said movement of said object, said detector output being configured to cause adjustment of at least one operating characteristic of said video camera to target said video camera on said object; and~~ signals to the at least one video camera, the plurality of sequenced detector output signals corresponding to each of an associated one of said changed objects.  
at least one recording device, said recording device including a recording media;  
said motion detector being further configured to:

~~command the camera to independently track multiple moving objects by cycling between views of the targets while simultaneously commanding said recording device to capture frames or video clips of each moving object;~~

~~provide a record command configured to cause said recording device to record at least a portion of a video output of said camera on said recording media while said camera is targeted on said object; and~~

~~command said recording device to record a varying number of images per second based on the nature of the video activity.~~

2. (Original) A system according to claim 1, wherein said video camera comprises a dome-type camera.

3. (Currently Amended) A system according to claim 1, wherein said lens ~~comprises a wide-angle lens~~ has a field of view fixedly directed to an area of interest.

4. (Original) A system according to claim 1, wherein said motion detector is fixedly mounted to said video camera.

5. (Original) A system according to claim 1, wherein said imager comprises a CCD imager.

6. (Currently Amended) A system according to claim 1, wherein said imager ~~comprises a CMOS imager~~ one of said plurality of sequenced detector output signals causes the at least one video camera to zoom in one of the multiple detection areas.

7. (Currently Amended) A system according to claim 1, wherein said motion detector further comprises a motion detect sequencer ~~configured for monitoring said video data for said movement of said object~~ lens is also used by said video camera to capture video images from said multiple detection areas.

8. (Original) A system according to claim 7, wherein said motion detector further comprises a controller for receiving an output of said motion detect sequencer, said controller being configured to provide said detector output.

9. (Original) A system according to claim 1, wherein said at least one operating characteristic comprises a pan, tilt or zoom characteristic of said video camera.

10. (Original) A system according to claim 1, wherein said detector output is provided to modify a pan, tilt and zoom characteristic of said video camera.

11. Cancelled.

12. (Original) A system according to claim 1, said system comprising a plurality of said motion detectors.

13. (Original) A system according to claim 12, wherein said video data associated with each of said motion detectors is time multiplexed.

14. (Original) A system according to claim 12, wherein said field of view of at least two of said motion detectors overlap.

15. (Original) A system according to claim 12, wherein said field of view of each of said motion detectors overlap.

16. (Currently Amended) A system according to claim 12, wherein said motion detectors are configured in a circular pattern around said video camera.

17. (Currently Amended) A system according to claim 12, wherein said fields of view of said motion detectors extend 360 degrees around said video camera.

18. (Original) A system according to claim 12, wherein said motion detectors are affixed to an annular ring.

19. (Currently Amended) A system according to claim 18, wherein said annular ring is disposed around said video camera.

20. (Currently Amended) A system according to claim 1, said system further comprising a user control interface coupled to said video camera for controlling said video camera in response to user-initiated input.

21. (Original) A system according to claim 1, wherein said imager comprises a low resolution imager.

22. (Currently Amended) A video surveillance system comprising:  
at least one video camera;  
at least one motion detector comprising:  
a wide-angle lens having a field of view fixedly directed to an area of interest,  
and  
an imager for receiving an image through said lens and converting said image to raw video data;  
said motion detector being configured to:  
~~monitor said video data for movement of an object in said field of view without~~  
~~application of at least one visual perception algorithm to said video data, and~~  
analyze said raw video data to detect changes from a first video frame to a next  
video frame;  
determine changes of objects in multiple detection areas in a field of view of said  
lens based on the presence of changes from the first video frame to the next video frame;  
sequence between the multiple detection areas having the presence of changes;  
and

~~provide a plurality of sequenced detector output in response to said movement of said object, said detector output being configured to cause adjustment of pan, tilt and zoom characteristics of said video camera to target said video camera on said object; and signals to the at least one video camera, the plurality of sequenced detector output signals corresponding to each of an associated one of said changed objects.~~

~~at least one recording device, said recording device including a recording media; said motion detector being further configured to:~~

~~command the camera to independently track multiple moving objects by cycling between views of the targets while simultaneously commanding said recording device to capture frames or video clips of each moving object;~~

~~provide a record command configured to cause said recording device to record at least a portion of a video output of said camera on said recording media while said camera is targeted on said object; and~~

~~command said recording device to record a varying number of images per second based on the nature of the video activity.~~

23. (Original) A system according to claim 22, wherein said video camera comprises a dome-type camera.

24. (Original) A system according to claim 22, wherein said motion detector is fixedly mounted to said video camera.

25. (Original) A system according to claim 22, wherein said imager comprises a CCD imager.

26. (Currently Amended) A system according to claim 22, wherein said imager comprises a CMOS imager one of said plurality of sequenced detector output signals causes the at least one video camera to zoom in one of the multiple detection areas.

27. (Original) A system according to claim 22, wherein said motion detector further comprises a motion detection sequencer configured for monitoring said video data for said movement of said object.

28. (Original) A system according to claim 27, wherein said motion detector further comprises a controller for receiving an output of said motion detect sequencer, said controller being configured to provide said detector output.

29. (Currently Amended) A system according to claim 22, wherein said system further comprising a user control interface coupled to said video camera for controlling said video camera in response to user-initiated input.

30. (Original) A system according to claim 22, wherein said imager comprises a low resolution imager.

31. (Currently Amended) A motion detector comprising:  
a lens, and  
an imager for receiving an image through said lens and converting said image to raw video data,  
said motion detector being configured to:

monitor analyze said raw video data ~~for to detect changes from a first video frame to a next video frame;~~

determine movement changes of an objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame; without application of at least one visual perception algorithm to said video data, and sequence between the multiple detection areas having the presence of changes;  
and

provide a plurality of sequenced detector output in response to said movement of said object, said detector output being configured to cause adjustment of at least one operating

~~characteristic of a video camera to target said video camera on said object; signals corresponding to each of an associated one of said changed objects.~~

~~command the camera to independently track multiple moving objects by eyeing between views of the targets while simultaneously commanding said recording device to capture frames or video clips of each moving object;~~

~~provide a record command configured to cause said recording device to record at least a portion of a video output of said camera on said recording media while said camera is targeted on said object; and~~

~~command said recording device to record a varying number of images per second based on the nature of the video activity.~~

32. (Original) A motion detector according to claim 31, wherein said lens comprises a wide-angle lens.

33. (Original) A motion detector according to claim 31, wherein said imager comprises a CCD imager.

34. (Currently Amended) A motion detector according to claim 31, wherein said imager comprises a CMOS imager one of said plurality of sequenced detector output signals causes the motion detector to zoom in one of the multiple detection areas.

35. (Original) A motion detector according to claim 31, wherein said motion detector further comprises a motion detect sequencer configured for monitoring said video data for said movement of said object.

36. (Original) A motion detector according to claim 35, wherein said motion detector further comprises a controller for receiving an output of said motion detect sequencer, said controller being configured to provide said detector output.

37. (Original) A motion detector according to claim 31, wherein said at least one operating characteristic comprises a pan, tilt or zoom characteristic of said video camera.

38. (Original) A motion detector according to claim 31, wherein said detector output is provided to modify a pan, tilt and zoom characteristic of said video camera.

39. (Original) A motion detector according to claim 31, wherein said imager comprises a low resolution imager.

40. (Currently Amended) A method of monitoring a moving object in a video system, said method comprising:

providing at least one motion detector, said motion detector comprising:

a lens having a field of view fixedly directed to an area of interest, and

an imager for receiving an image through said lens and converting said image to raw video data;

~~operating said motion detector to continually monitor said video data to detect movement of said moving object without application of at least one visual perception algorithm to said video data~~ analyze said raw video data to detect changes from a first video frame to a next video frame;

determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;

sequence between the multiple detection areas having the presence of changes; and

providing an provide a plurality of sequenced detector output from said motion detector in response to said movement to cause adjustment of at least one operating characteristic of a video camera to target said video camera on said moving object; signals corresponding to each of an associated one of said changed objects.

recording with at least one recording device, said recording device including a recording media;



~~operating said motion detector to command the camera to independently track multiple moving objects by cycling between views of the targets while simultaneously commanding said recording device to capture frames or video clips of each moving object;~~

~~operating said motion detector to provide a record command configured to cause said recording device to record at least a portion of a video output of said camera on said recording media while said camera is targeted on said object; and~~

~~operating said motion detector to provide a record command to said recording device to record a varying number of images per second based on the nature of the video activity.~~

41. (Currently Amended) A method according to claim 40, wherein ~~said lens comprises a wide-angle~~ one of said plurality of sequenced detector output signals causes the motion detector to zoom in one of the multiple detection areas.

42. Cancelled.

43. (Original) A method according to claim 40, said method comprising providing a plurality of said motion detectors, each of said motion detectors being configured to monitor an associated stream of said video data.

44. (Original) A method according to claim 43, wherein said video data associated with each of said motion detectors is time multiplexed.

45. (Original) A method according to claim 43, wherein said field of view of at least two of said motion detectors overlap.

46. (Original) A method according to claim 43, wherein said field of view of each of said motion detectors overlap.

47. (Currently Amended) A method according to claim 43, wherein said motion detectors are configured in a circular pattern around said video camera.

48. (Currently Amended) A method according to claim 43, wherein said fields of view of said motion detectors extend 360 degrees around said video camera.

49. (Original) A method according to claim 43, wherein said motion detectors are affixed to an annular ring.

50. (Currently Amended) A method according to claim 49, wherein said annular ring is disposed around said video camera.

51. (Original) A method according to claim 40, wherein said imager comprises a low resolution imager.

52. (Currently Amended) A method of monitoring multiple moving objects in a video system, said method comprising:

providing at least one motion detector, said motion detector comprising;

a lens having a field of view fixedly directed to an area of interest, and

an imager for receiving an image through said lens and converting said image to

raw video data;

~~operating said motion detector to continually monitor said video data to detect movement of said moving objects without application of at least one visual perception algorithm, to said video data~~  
analyze said raw video data to detect changes from a first video frame to a next video frame;

determine changes of objects in multiple detection areas in a field of view of said lens based on the presence of changes from the first video frame to the next video frame;

sequence between the multiple detection areas having the presence of changes; and

providing provide a plurality of ~~sequenced~~ outputs from said motion detector, each of said outputs being in response to movement of an associated one of said moving objects and being configured to cause adjustment of at least one operating characteristic of at least one associated video camera to target said at least one associated video camera on said associated

~~one of said moving objects signals corresponding to each of an associated one of said changed objects;~~ and

~~providing at least one recording device; said recording device including a recording media;~~

~~operating said motion detector to further:~~

~~command the camera to independently track multiple moving objects by cycling between views of the targets while simultaneously commanding said recording device to capture frames or video clips of each moving object;~~

~~provide a record command configured to cause said recording device to record at least a portion of a video output of said camera on said recording media while said camera is targeted on said object; and~~

~~provide a record command to said recording device to record a varying number of images per second based on the nature of the video activity.~~

53. (Currently Amended) A method according to claim 52, wherein ~~said outputs are sequentially provided~~ one of said plurality of sequenced detector output signals causes the motion detector to zoom in one of the multiple detection areas.

54. (Currently Amended) A method according to claim 53, wherein said motion detector is configured to provide at least one record command to record video of each of said moving objects while said at least one video camera is targeted thereon.

55. (Original) A method according to claim 52, wherein said lens comprises a wide-angle lens.